

ABSTRACT OF THE DISCLOSURE

A differential (1) for motor vehicles installed between two half-shafts (2, 3) on which two drive wheels are keyed is described, said differential comprising a box (4) driven by the engine by means of 5 the connecting means (5) which cause it to rotate about the axes (L-L) of the half-shafts (2, 3), on the free ends of the latter there being keyed two bevel gears (6, 7) housed inside the box (4), and the differential (1) and the half-shafts (2, 3) being contained inside a casing (8). In this differential (1) each of the flanges (9, 10) through which the half-shafts (2, 3) penetrate into the box (4) has a cylindrical extension (11) outwards, at least the end of which has grooves (12i) which are complementary with respect to other grooves (13i) formed on the surface of a coaxial cavity (14) formed in a sleeve (15) slidable coaxially on each half-shaft (3) and rotationally locked thereto, mounted inside the said casing (8) and provided with means (16) which cause it to slide in the two directions (A, B) causing engagement between the grooves (12i, 13i) or disengagement thereof, locking together the box (4) and the half-shafts (2, 3) or performing disengagement thereof.